

## REMARKS

This paper is responsive to the Office Action dated 07/09/2008 wherein claims 1, 2, 4-17 and 19-32 were rejected, and claims 28-30 were objected to. By this paper, claims 28-30 have been amended. Claims 1, 2, 4-17 and 19-32 remain pending in this application. In view of the following remarks, Applicants request further examination and reconsideration of the present patent application.

### 35 USC § 112

Applicants respectfully traverse the rejection of claims 13-17, 19-22 and 30-31 under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. .

Independent Claim 13 recites: *A medical device positioning system for use during a medical procedure on a subject performed during imaging, the system comprising: a medical device adapted for internal use within the subject for performing a medical procedure; an imaging device for acquiring image data of a region of interest within the subject; a tracking device for tracking a location of the medical device; and, a processor coupled to the medical imaging device and the tracking device for generating images of the region of interest with a visual representation of the medical device superimposed on the images and the processor is further adapted to monitor a position of the medical device relative to the region of interest, the processor responding to change in the position by repositioning the medical device within the target region of interest without moving the subject and providing feedback to an interface.* Applicants respectfully submit that the capability of processor to respond to change in the position of a medical device by repositioning the medical device within a target region of interest with moving the subject is well understood to a person skilled in the art for a system that could be used for delivery of many different diagnostic and interventional devices. The processor is a part of the system; the system can be used to guide the biopsy needle guide. (See Application page 5, lines 10-14)

Therefore, claim 13 complies with the written description requirement in the specification. Claims 14-17, 19-22, and 30-31 depend directly or indirectly on claim 13. Accordingly, the Applicants respectfully submit that claims 14-17, 19-22, and 30-31 are allowable by virtue of their dependency from allowable base claim. Further, claims 14-17, 19-22, and 30-31 are allowable by virtue of the subject matter they separately recite. Thus, it is respectfully requested that the rejection of claims 13-17, 19-22 and 30-31 under 35 USC § 112 be withdrawn.

### **Claim Objections**

Applicants respectfully note the Examiner's objections to claims 28-30. Claims 28-30 have been amended. Claim 28 now recites *The method of claim 23 further comprising the step of wherein the feedback is used for navigating the medical device to a target region of interest based on the feedback.* Claim 29 now recites *The system of claim 1 further comprising the step of wherein the feedback is used for navigating the medical device during the medical procedure based on the feedback.* Claim 30 now recites *The system of claim 13 further comprising the step of wherein the feedback is used for navigating the medical device during the medical procedure based on the feedback.*

Applicants respectfully request that the Examiner withdraw the objections to Claims 28-30.

### **35 USC § 102**

Applicants respectfully traverse the rejection of claims 1, 2, 4-10 and 23-29 under 35 USC §102(b), as being anticipated by Dumoulin et al., U.S. Patent No. 5,251, 635 (hereinafter "Dumoulin '635").

Independent claims 1 and 23 recite in generally similar language, *repositioning the medical device within the target region of interest without moving the subject.* Although, Dumoulin '635 teaches a tracking device, automatic placement and alignment of the subject by the use of support arm. It fails to disclose or suggest positioning of the medical device within the target region of interest without moving the subject. Applicants further submit that tracking and imaging a medical device cannot be interpreted as positioning a medical device within the target region of interest.

Applicants respectfully submit that Dumoulin '635 does not disclose or suggest a medical device monitoring and positioning subsystem as in the present claims. The monitoring subsystem disclosed in Dumoulin '635 is configured only to track the medical device within the subject by repeated acquisition of images.

Further, the Applicants respectfully submit that although Dumoulin '635 discloses a superimposed visual icon on the X-ray image of the subject to represent the tracked medical device, Dumoulin '635 fails to disclose providing an audio or text advisory feedback to the interface unit.

Claims 2, 4-10 and 24-29 depend directly or indirectly from claims 1 and 23. Accordingly, the Applicants respectfully submit that claims 2, 4-10 and 24-29 are allowable by virtue of their dependency from allowable base claims. Further, claims 2, 4-10 and 24-29 are allowable by virtue of the subject matter they separately recite. Thus, the Applicants respectfully request that the Examiner withdraw the rejection of claims 1, 2, 4-10 and 23-29 under 35 USC 102(b).

### **35 USC §103**

Applicants respectfully traverse the rejection of claims 24, 25 and 32 under 35 USC §103(a) as being unpatentable over Dumoulin et al. US Patent No. 5,251,635 in view of Dumoulin et al. US Patent No. 5,251,635. Further, Applicants respectfully traverse the rejection of claims 11 and 12 under 35 USC §103(a) as being unpatentable over Dumoulin et al. US Patent No. 5,251,635 in view of Panescu et al. US Patent No. 5,916,163.

A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination.

With regard to claims 24, 25 and 32, claims 24, 25 and 32 recite in generally similar language *activating an audio or text advisory feedback to the interface unit*. Dumoulin '635 fails to disclose the claimed predetermined or pre-programmed response such as terminating therapy or activating an audio or a text advisory feedback to the interface unit. Although, Dumoulin '635 discloses superimposed visual icon on the X-ray image of the subject to represent the tracked medical device. Dumoulin '635 fails to disclose an audio or text advisory feedback such as "Device has moved. Laser has been shut down" or text output such as "Device has moved. Do you wish to reposition?" (See Application page 9, lines 20-21). Clearly the visual icon representing the tracked medical device in Dumoulin '635 cannot be equated to displaying text or audio advisory feedback as in the present application. Therefore, no *prima facie* case of obviousness exists for claims 24, 25 and 32.

Further, claims 11-12 and 24- 25 depend directly or indirectly from claims 1 and 23 respectively and are allowable by virtue of their dependency from the base claims. Further, the claims are allowable for the subject matter they separately recite.

Accordingly Applicants submit that the combination of the cited references would not

Application No. 10/064,749  
Reply to Office Action of 07/09/2008

render the subject matter of claim 11,12, 24, 25 and 32 obvious to one of ordinary skill in the art. Applicants respectfully request that the Examiner withdraw the rejection under 35 USC 103(a).

### **Summary**

For the reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and allowance of the application are, therefore, respectfully requested.

If the Examiner believes that anything further is necessary to place the application in better condition for allowance, the Examiner is kindly asked to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

/Patrick K. Patnode/  
Patrick K. Patnode  
Reg. No. 40,121

General Electric Company  
One Research Circle  
Building K1, Room 3A52A  
Niskayuna, New York 12309  
Telephone: (518) 387-5286  
Date: October 10<sup>th</sup>, 2008